

Notice of Allowability

Application No.

10/798,383

Examiner

Andrae S. Allison

Applicant(s)

NAKAI ET AL.

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 7/24/2007.
2. ☒ The allowed claim(s) is/are 1 and 4-17 now renumbered 1-15.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with James Love (Reg # 58421) on August 16, 2007.

The application has been amended as follows: Amend the preamble of claim 6, 9, 14 and 17 as follows:

In claim 6, lines 1-2 please delete [A computer program product tangibly embodying a program of instructions stored on a computer-readable storage medium] and add -- A computer-readable medium storing a computer program product tangibly embodying a program of instructions --.

In claim 9, lines 1-2 please delete [A computer program product tangibly embodying a program of instructions stored on a computer-readable storage medium] and add -- A computer-readable medium storing a computer program product tangibly embodying a program of instructions --.

In claim 14, lines 1-2 please delete [A computer program product tangibly embodying a program of instructions stored on a computer-readable storage medium] and add -- A computer-readable medium storing a computer program product tangibly embodying a program of instructions --.

In claim 17, lines 1-2 please delete [A computer program product tangibly embodying a program of instructions stored on a computer-readable storage medium] and add -- A computer-readable medium storing a computer program product tangibly embodying a program of instructions --.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: After reviewing the remarks made by Applicant in response to the non-final action the Examiner finds the remarks to be persuasive. The most pertinent prior art is Arai (US Patent No.: 6,813,370) and Lee et al (US Patent No.: 7,113,632). Arai discloses a stereo image monitoring method for monitoring a common, which photographed by a pair of image pickup devices, the method comprising: inputting a pair of images from the image pickup devices. Arai teaches detecting at least four straight lines from each image of the pair of images, detecting at least four sets of corresponding lines between the pair of images using an image feature in neighboring are of each of the four straight lines detected for each of the pair of images, calculating a transformation matrix

between the image pickup devices by using the four sets of corresponding lines and transforming one image of the pair of images by using the transformation matrix to detect an object in the common area. Arai further teach obtaining a data series regarding the image feature in the neighboring area for each for each of the four straight lines detected for each image of the pairs.. However, Arai does not expressly calculating a transformation matrix. Lee discloses a rectification method that includes calculating a transformation matrix. However, neither Arai or Lee teach obtaining data difference between each of data in the data series of each of the four straight lines detected for a first image of the pair of images and each of data in the data series of each of the four straight lines detected for a second image of the pair of images, obtaining normalized distances by normalized a weighted sum of the data differences using a sum of weighting factors and determining one of the four straight lines in the first image of the pairs of images and the corresponding one of the four straight lines in the second image of the pair of images having a smallest normalized distance as a pair of corresponding lines. The examiner finds no reason or motivation to combine the above references in an obvious rejection thus placing the application in condition for allowance.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made part of the record and not relied upon is considered pertinent to applicant's disclosure.

(US Patent No.: 6,985,175) is cited to teach a camera calibration device and method.

Nakai et al (US Patent No.: 6,906,620) is cited to teach an obstacle detection device and method.

Onoguchi (US Patent No.: 5,694,483) is cited to teach a measurement face extraction apparatus and method.

Inquires

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrae S. Allison whose telephone number is (571) 270-1052. The examiner can normally be reached on Monday-Friday, 8:00 am - 5:00 +- pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

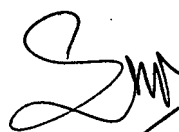
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For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrae Allison

August 17, 2007

A.A.

A handwritten signature in black ink, appearing to read 'Samir', written over a large, thin, oval-shaped line that extends from the left side of the page.

SAMIR AHMED
PRIMARY EXAMINER